

**POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST**  
**(REVOCATION OF PRIOR POWERS)**

Director of the U.S. Patent Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Hitachi, Ltd., as assignee of record of the entire interest of the application identified in the attached Appendix as per the Assignment corresponding to said application, recordation date and location of said Assignment being indicated in the attached Appendix, hereby revoke all powers of attorneys previously given and hereby appoint the following attorneys to prosecute and transact all business in the Patent and Trademark Office connected therewith:

John R. Mattingly, Reg. No. 30,293  
Shrinath Malur, Reg. No. 34,663;  
and the attorneys/agents associated with **Customer No. 24956**.

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The undersigned submits that the undersigned has power to act on behalf of the assignee, the evidentiary documents have been reviewed and certifies that, to the best of assignee's knowledge and belief, title is in the assignee seeking to take the action.

Executed this 13<sup>th</sup> day of July, 2009.

HITACHI, LTD.



Kensuke Oka  
Managing Director, Intellectual Property Group  
(Authorized Signing Officer)

## APPENDIX A

ATTY. DKT. NO.	INVENTOR	SERIAL NO.	FILING DATE	RECORDATION DATE	REEL/FRAME
500.35346X00	Y. YAMAMOTO	08/833,347	4-Apr-97	4-Apr-97	008524/0791
500.35346CX1	Y. YAMAMOTO	09/335,175	17-Jun-99	4-Apr-97	008524/0791
500.35346CX2	Y. YAMAMOTO	10/112,865	2-Apr-02	4-Apr-97	008524/0791
500.35346CX2	Y. YAMAMOTO	10/684,453	15-Oct-03	4-Apr-97	008524/0791
500.35346CX4	Y. YAMAMOTO	11/142,458	2-Jun-05	4-Apr-97	008524/0791
500.35346CX5	Y. YAMAMOTO	11/405,544	18-Apr-06	4-Apr-97	008524/0791
500.36547CX1	Y. YAMAMOTO	09/149,666	9-Sep-98	9-Sep-98	009450/0398
500.36547CX2	Y. YAMAMOTO	10/139,248	7-May-02	9-Sep-98	009450/0398
500.36547CC3	Y. YAMAMOTO	10/614,802	9-Jul-03	9-Sep-98	009450/0398
500.36547CC4	Y. YAMAMOTO	10/831,138	26-Apr-04	9-Sep-98	009450/0398
500.36547CC5	Y. YAMAMOTO	11/583,007	19-Oct-06	9-Sep-98	009450/0398
501.37526X00	K. SAKAMOTO	09/392,623	9-Sep-99	9-Sep-99	010237/0146
501.37526CX1	K. SAKAMOTO	10/614,134	8-Jul-03	9-Sep-99	010237/0146
501.37526CX2	K. SAKAMOTO	11/828,729	26-Jul-07	9-Sep-99	010237/0146
500.37485X00	K. HAKAMATA	09/383,370	26-Aug-99	26-Aug-99	010210/0606
500.37485CX1	K. HAKAMATA	10/412,388	14-Apr-03	26-Aug-99	010210/0606
500.37485CX2	K. HAKAMATA	10/412,232	14-Apr-03	26-Aug-99	010210/0606
500.37485CX3	K. HAKAMATA	11/182,952	18-Jul-05	26-Aug-99	010210/0606
500.37485CX4	K. HAKAMATA	11/407,243	20-Apr-06	26-Aug-99	010210/0606
520.38161X00	K. ARUGA	09/495,868	2-Feb-00	2-Feb-00	010540/0059
520.38161CX1	K. ARUGA	10/337,397	7-Jan-03	2-Feb-00	010540/0059
520.38161CX2	K. ARUGA	10/615,907	10-Jul-03	2-Feb-00	010540/0059
520.38161CX3	K. ARUGA	10/632,855	4-Aug-03	2-Feb-00	010540/0059
520.38161CX4	K. ARUGA	10/933,387	3-Sep-04	2-Feb-00	010540/0059
520.38833X00	K. MIKI	09/629,706	31-Jul-00	31-Jul-00	010989/0044
520.38833CX1	K. MIKI	10/894,058	20-Jul-04	31-Jul-00	010989/0044
500.39520X00	T. KAMANO	09/764,286	19-Jan-01	17-Apr-01	011708/0095
500.39520CX1	T. KAMANO	10/425,915	30-Apr-03	17-Apr-01	011708/0095
500.39520CX2	T. KAMANO	10/828,299	21-Apr-04	17-Apr-01	011708/0095
500.39520CX3	T. KAMANO	11/495,756	31-Jul-06	17-Apr-01	011708/0095
500.39520CX4	T. KAMANO	11/892,985	29-Aug-07	17-Apr-01	011708/0095
500.39944X00	Y. MATSUMOTO	09/820,947	30-Mar-01	18-Jun-01	011900/0852
500.39944CX1	Y. MATSUMOTO	11/014,887	20-Dec-04	18-Jun-01	011900/0852
500.39944CX2	Y. MATSUMOTO	12/155,411	4-Jun-08	18-Jun-01	011900/0852
500.40494X00	Y. KANO	09/931,253	17-Aug-01	1-Nov-01	012293/0701
500.40494CX1	Y. KANO	10/782,787	23-Feb-04	1-Nov-01	012293/0701
500.40494CC2	Y. KANO	10/991,421	19-Nov-04	1-Nov-01	012293/0701
500.40494CC3	Y. KANO	12/245,122	3-Oct-08	1-Nov-01	012293/0701
500.41208X00	R. ITO	10/076,553	19-Feb-02	19-Feb-02	012603/0631
500.41208CX1	R. ITO	10/902,794	2-Aug-04	19-Feb-02	012603/0631
500.41208CX2	R. ITO	10/902,795	2-Aug-04	19-Feb-02	012603/0631
500.41208CX3	R. ITO	11/407,978	21-Apr-06	19-Feb-02	012603/0631
500.41227X00	Y. TAKEDA	10/081,535	25-Feb-02	25-Feb-02	012633/0883
500.41227CX1	Y. TAKEDA	12/371,950	17-Feb-09	25-Feb-02	012633/0883
500.42212X00	T. YANO	10/287,676	5-Nov-02	8-Jan-03	013646/0948
500.42212VX1	T. YANO	11/812,693	21-Jun-07	8-Jan-03	013646/0948
500.42212CV2	T. YANO	11/896,082	30-Aug-07	8-Jan-03	013646/0948
500.42584X00	N. MORISHITA	10/378,644	5-Mar-03	5-Jun-03	014141/0108

## APPENDIX A

ATTY. DKT. NO.	INVENTOR	SERIAL NO.	FILING DATE	RECORDATION DATE	REEL/FRAME
500.42584CX1	N. MORISHITA	11/182,955	18-Jul-05	5-Jun-03	014141/0108
500.42584CX2	N. MORISHITA	11/517,380	8-Sep-06	5-Jun-03	014141/0108
500.42584CX3	N. MORISHITA	12/007,724	15-Jan-08	5-Jun-03	014141/0108
500.42585X00	K. KITAMURA	10/382,918	7-Mar-03	4-Jun-03	014140/0037
500.42585VX1	K. KITAMURA	12/222,144	4-Aug-08	4-Jun-03	014140/0037
500.42704X00	I. YAGISAWA	10/419,096	21-Apr-03	4-Aug-03	014350/0497
500.42704CX1	I. YAGISAWA	10/962,623	13-Oct-04	4-Aug-03	014350/0497
500.42704CX2	I. YAGISAWA	10/962,599	13-Oct-04	4-Aug-03	014350/0497
500.42704CX3	I. YAGISAWA	10/988,495	16-Nov-04	4-Aug-03	014350/0497
500.42704XC4	I. YAGISAWA	10/988,496	16-Nov-04	4-Aug-03	014350/0497
500.42704CX5	I. YAGISAWA	10/988,704	16-Nov-04	4-Aug-03	014350/0497
520.42704CX6	I. YAGISAWA	10/988,564	16-Nov-04	4-Aug-03	014350/0497
500.42704CX7	I. YAGISAWA	11/785,780	20-Apr-07	4-Aug-03	014350/0497
500.42704CX8	I. YAGISAWA	12/076,141	14-Mar-08	4-Aug-03	014350/0497
500.43002X00	T. SAKUMA	10/634,759	6-Aug-03	14-Nov-03	014706/0168
501.43017X00	T. YANO	10/636,696	8-Aug-03	8-Aug-03	014382/0304
501.43017CX1	T. YANO	12/068,681	11-Feb-08	8-Aug-03	014382/0304
501.43042X00	M. YAMAMOTO	10/659,362	11-Sep-03	11-Sep-03	014492/0418
				28-Feb-06	017359/0963
501.43042PX1	M. YAMAMOTO	11/288,205	29-Nov-05	11-Sep-03	014492/0418
				28-Feb-06	017359/0963
501.43042CP2	M. YAMAMOTO	11/437,700	22-May-06	11-Sep-03	014492/0418
				28-Feb-06	017359/0963
501.43042CP3	M. YAMAMOTO	12/216,472	7-Jul-08	11-Sep-03	014492/0418
				28-Feb-06	017359/0963
500.43055X00	T. SAKUMA	10/642,685	19-Aug-03	26-Nov-03	014745/0968
500.43096X00	N. KAWAMURA	10/650,842	29-Aug-03	25-Nov-03	014745/0970
500.43096CX1	N. KAWAMURA	11/227,180	16-Sep-05	25-Nov-03	014745/0970
500.43116X00	K. SUZUKI	10/659,398	11-Sep-03	5-Dec-03	014771/0461
500.43116CX1	K. SUZUKI	11/056,007	14-Feb-05	5-Dec-03	014771/0461
500.43116CX2	K. SUZUKI	11/056,006	14-Feb-05	5-Dec-03	014771/0461
500.43116CX3	K. SUZUKI	11/056,005	14-Feb-05	5-Dec-03	014771/0461
500.43116CX4	K. SUZUKI	11/055,994	14-Feb-05	5-Dec-03	014771/0461
500.43116CX5	K. SUZUKI	11/056,002	14-Feb-05	5-Dec-03	014771/0461
500.43116CX6	K. SUZUKI	11/056,001	14-Feb-05	5-Dec-03	014771/0461
500.43116CX7	K. SUZUKI	11/055,968	14-Feb-05	5-Dec-03	014771/0461
500.43116CX8	K. SUZUKI	12/370,846	13-Feb-09	5-Dec-03	014771/0461
500.43322X00	A. SHIMADA	10/729,925	9-Dec-03	11-Mar-04	015069/0626
500.43322CX1	A. SHIMADA	11/057,756	15-Feb-05	11-Mar-04	015069/0626
500.43322CX2	A. SHIMADA	11/057,755	15-Feb-05	11-Mar-04	015069/0626
500.43322CX3	A. SHIMADA	11/057,754	15-Feb-05	11-Mar-04	015069/0626
500.43444X00	M. SONE	10/765,165	28-Jan-04	9-Aug-04	015669/0206
500.43444CX1	M. SONE	11/194,673	2-Aug-05	9-Aug-04	015669/0206
500.43444CX2	M. SONE	11/194,674	2-Aug-05	9-Aug-04	015669/0206
500.43444CX3	M. SONE	11/822,306	5-Jul-07	9-Aug-04	015669/0206
500.43451X00	A. KANO	10/766,015	29-Jan-04	20-Jul-04	015587/0497
500.43451CX1	A. KANO	11/024,644	30-Dec-04	20-Jul-04	015587/0497
500.43451CX2	A. KANO	11/024,627	30-Dec-04	20-Jul-04	015587/0497

## APPENDIX A

ATTY. DKT. NO.	INVENTOR	SERIAL NO.	FILING DATE	RECORDATION DATE	REEL/FRAME
TMI-5827-03	A. KANO	11/024,626	30-Dec-04	20-Jul-04	015587/0497
SUN-5827-04	A. KANO	11/025,075	30-Dec-04	20-Jul-04	015587/0497
TMI-5827-05	A. KANO	11,723,443	20-Mar-07	20-Jul-04	015587/0497
566.43577X00	N. IKEGAYA	10/788,453	1-Mar-04	5-Jun-04	015422/0391
566.43577CX1	N. IKEGAYA	11/207,774	22-Aug-05	5-Jun-04	015422/0391
566.43577CX2	N. IKEGAYA	12/149,292	30-Apr-08	5-Jun-04	015422/0391
500.43776X00	M. TAKAHASHI	10/823,618	14-Apr-04	20-Jul-04	015586/0844
500.43776CX1	M. TAKAHASHI	11/196,418	4-Aug-05	20-Jul-04	015586/0844
500.43776CX2	M. TAKAHASHI	11/526,598	26-Sep-06	20-Jul-04	015586/0844
500.43776CX3	M. TAKAHASHI	11/898,945	18-Sep-07	20-Jul-04	015586/0844
500.43776CX4	M. TAKAHASHI	11/907,643	16-Oct-07	20-Jul-04	015586/0844
500.43792X00	S. MORITA	10/827,325	20-Apr-04	20-Jul-04	015586/0846
500.43792CX1	S. MORITA	11/490,100	21-Jul-06	20-Jul-04	015586/0846
500.43792CX2	S. MORITA	11/717,020	13-Mar-07	20-Jul-04	015586/0846
500.43792CX3	S. MORITA	12/254,453	20-Oct-08	20-Jul-04	015586/0846
1309.43818X00	K. YAMAGAMI	10/834,989	30-Apr-04	20-Jul-04	015588/0263
1309.43818CX1	K. YAMAGAMI	11/448,870	8-Jun-06	20-Jul-04	015588/0263
1309.43818CX2	K. YAMAGAMI	11/976,483	25-Oct-07	20-Jul-04	015588/0263
1309.43818CX3	K. YAMAGAMI	12/467,597	18-May-09	20-Jul-04	015588/0263
566.43908X00	Y. EGUCHI	10/855,356	28-May-04	30-Jul-04	015637/0836
566.43908CX1	Y. EGUCHI	11/032,172	11-Jan-05	30-Jul-04	015637/0836
566.43908CX2	Y. EGUCHI	11/594,787	9-Nov-06	30-Jul-04	015637/0836
274.43166X00	A. FUJIBAYASHI	10/788,390	1-Mar-04	1-Mar-04	015032/0742
274.43166CX1	A. FUJIBAYASHI	11/592,981	6-Nov-06	1-Mar-04	015032/0742
274.43166CX2	A. FUJIBAYASHI	11/987,152	28-Nov-07	1-Mar-04	015032/0742
274.43167X00	A. FUJIBAYASHI	10/784,994	25-Feb-04	25-Feb-04	015024/0618
274.43167CX1	A. FUJIBAYASHI	11/526,579	26-Sep-06	25-Feb-04	015024/0618
274.43168X00	A. FUJIBAYASHI	10/784,260	24-Feb-04	24-Feb-04	015019/0623
274.43168CX1	A. FUJIBAYASHI	11/360,470	24-Feb-06	24-Feb-04	015019/0623
274.43168CX2	A. FUJIBAYASHI	11/545,562	11-Oct-06	24-Feb-04	015019/0623
274.43168CX3	A. FUJIBAYASHI	11/882,911	7-Aug-07	24-Feb-04	015019/0623
274.43168CX4	A. FUJIBAYASHI	12/463,779	11-May-09	24-Feb-04	015019/0623
274.43199X00	T. AMANO	10/823,619	14-Apr-04	27-Aug-04	015738/0247
274.43199CX1	T. AMANO	11/640,933	19-Dec-06	27-Aug-04	015738/0247
274.43202X00	S. KODAMA	10/802,853	18-Mar-04	18-Mar-04	015122/0155
274.43266X00	A. YAMAMOTO	09/829,470	9-Apr-01	10-May-01	011793/0373
274.43266PX1	A. YAMAMOTO	10/688,277	17-Oct-03	10-May-01	011793/0373
274.43266CX2	A. YAMAMOTO	10/801,686	17-Mar-04	10-May-01	011793/0373
274.43266CX3	A. YAMAMOTO	10/801,685	17-Mar-04	10-May-01	011793/0373
274.43266CX4	A. YAMAMOTO	10/883,743	6-Jul-04	10-May-01	011793/0373
274.43266CX5	A. YAMAMOTO	11/360,471	24-Feb-06	10-May-01	011793/0373
274.43266CP6	A. YAMAMOTO	11/637,063	12-Dec-06	10-May-01	011793/0373
274.43266CP7	A. YAMAMOTO	12/155,965	12-Jun-08	10-May-01	011793/0373
274.43686X00	Y. KANO	10/867,657	16-Jun-04	16-Jun-04	015485/0263
274.43686CX1	Y. KANO	11/319,609	29-Dec-05	16-Jun-04	015485/0263